

Application Number: 10/564,170
Amendment dated: January 9, 2007
Reply to Office Action dated: October 11, 2006

REMARKS/ARGUMENTS

Applicant thanks the Examiner for his consideration of this case. Claims 1 through 37 are pending in the current application and no claims have yet been allowed. In the specification, an element number "**4d**" in the List of Reference Numerals has been added to properly reference element **4d** in FIG. 3. No new matter has been added to the application.

The Examiner has rejected claims 1-4, 6-8, 10-11, 13-18, 20, 21, and 23 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,359,251 to Picard, et al. (the '251 Patent). The Examiner contends that the '251 Patent "teaches volume control via pressure sensing feedback via volume flow control PFC valve." Applicant respectfully traverses this contention. The PFC valves disclosed in the '251 Patent are described variously as "proportional flow control" valves (in col. 12, lines 44-45 and lines 62-64) and "proportional solenoid valves" (see col. 13 line 57 through col. 14 line 19). The '251 Patent describes the function of these PFC valves as follows:

Referring to FIGs. **10A** and **10B**, a proportional solenoid valve includes a solenoid coil **138**, an armature assembly **124**, a yolk **140**, a pole **134** and a flat spring **132**. As the solenoid coil **138** is energized, the coil magnetomotive force induces a flux through yoke **140** and pole **134**, across a working gap **135**, through armature assembly **124**, and back to yoke **140** via flux concentrator **148**... As current is increased to the coil, the flow output of the valve increases proportionally. The PFC valve described in reference to FIGs. **10A** and **10B** is exemplary only. Proportional solenoid valves operating under other principles or incorporating other structures can also be used in accordance with the present invention. (col. 13 line 57 through col. 14 line 19. Emphasis added.)

The '251 further clarifies the operation of the PFC valves by distinguishing them from the basic solenoid valves used elsewhere in the invention:

The solenoid valve **75** opens or closes depending on the command signal from the CNC **12**. The solenoid valve **75** is a simpler valve than the proportional solenoid valves **72**, **73**, **74**. The solenoid valve **75** does not have the flat spring configuration described in the proportional solenoid valves **72**, **73**, **74** to enable proportional flow control. (col. 14 lines 21-25. Emphasis added.)

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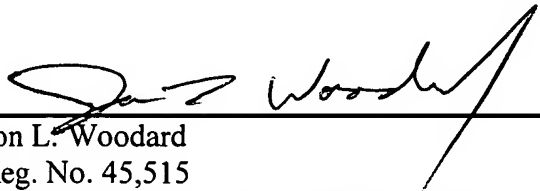
As described in the '251 Patent, flow control by the PFC valves is not by controlling the volume of flow but by the proportional increase in current to a solenoid valve. Therefore the '251 Patent does not teach the claimed elements of the instant application.

The Examiner rejects claims 5, 9, 12, 19, and 22-37 under 35 U.S.C. § 103(a) as being unpatentable over the '251 Patent in view of German Patent No. DE 20121641. The applicant contends that the German Patent No. DE 20121641 is not prior art to the instant application as it was, at the time the instant invention was made, owned by the same entity or subject to an obligation of assignment to the same entity under 35 U.S.C. § 103(c). The inventors of the instant application are also the inventors of German Patent No. DE 20121641. Furthermore, as discussed above, the '251 Patent does not teach the claimed subject matter.

In view of the foregoing, applicant submits that claims 1-37 are in a proper condition for allowance. Allowance of claims 1 through 37 is respectfully requested.

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Respectfully Submitted,

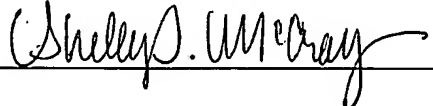


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Shelley D. McCray